



***AASHTO Presentation on Results of
Survey Dealing with
Use of Maturity Meters by State DOTs***

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In January of 2008, the Computers and Technology Section sent out a survey with 4 question dealing with how the different states were using maturity meters for measuring concrete strength for opening sections of pavement to traffic and/or their use for acceptance purposes.

The survey questions were:

- 1) Does your State use maturity meters for opening PCCP to traffic?**
- 2) Do you use the results of the maturity meters in lieu of having the project make beams or cylinders for acceptance of PCCP for payment?**
- 3) If the answer to question #2 above is yes, how well is this working? Have you had many problems or concerns?**
- 4) If your state is using maturity meters as referenced above, would you have a person on staff that would be willing to make a presentation at our 2008 SOC Conference that will be held this year in San Antonio, TX. ?**



Results of Survey

- 31 of the 50 States DOTs responded to our survey = a 62% return.
- In 2007, the State of California DOT put together a survey dealing with use of Concrete Maturity Methods. The report that was produced from that survey stated that 17 states responded = a 34 % return. So our response rate was somewhat better than that the previous survey.
- The California survey learned that:
 - 9 States had no current specifications dealing with maturity testing.
 - 7 did have specifications dealing with maturity testing.
 - 1 State responded that they were working on a future specification.



Results of Survey

- The State of California survey learned that the most commonly used test method was ASTM C 1074.
- They found that most states use the maturity meter to estimate concrete strength development for determining job control (opening to traffic, ending cold weather concrete protection, and removing falsework or framework).
- Some states did respond that they used the test to monitor timing of sawing operations (cutting pavement joints).
- Our survey was not as detailed as California's and as you will see, the use of the maturity meter has not changed much since California's survey in 2007.



Results of Survey

The survey that we just sent this last year produced these results:

- Question #1: **Does your State use maturity meters for opening PCCP to traffic?**

14 states stated they **do not** use maturity meters at all.

17 states use them in some manner on projects (opening pavements to traffic, patches, form removal, etc.)

19 states didn't respond to the survey.

- Question #2: **Do you use the results of the maturity meters in lieu of having the project make beams or cylinders for acceptance of PCCP for payment?**

All 31 states that responded said no, they still make beams or cylinders and do not use the maturity meter for acceptance.



Survey Results (cont.)

- Question #3: **If the answer to question #2 above is yes, how well is this working? Have you had many problems or concerns?**

Since no state responded “yes” to question #2, I have nothing to respond for this question.

- Question #4: **If your state is using maturity meters as referenced above, would you have a person on staff that would be willing to make a presentation at our 2008 SOC Conference that will be held this year in San Antonio, TX. ?**

Several states did respond that they could provide a speaker to make a presentation on using maturity meters for this conference and based on those responses, the Computers & Technology Section choose John Smythe of the IOWA DOT to speak at this conference.

